



Natural Heritage &
Endangered Species
Program

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
Route 135
Westborough, MA 01581
(508) 792-7270 ext. 200

MASSACHUSETTS THREATENED PLANTS

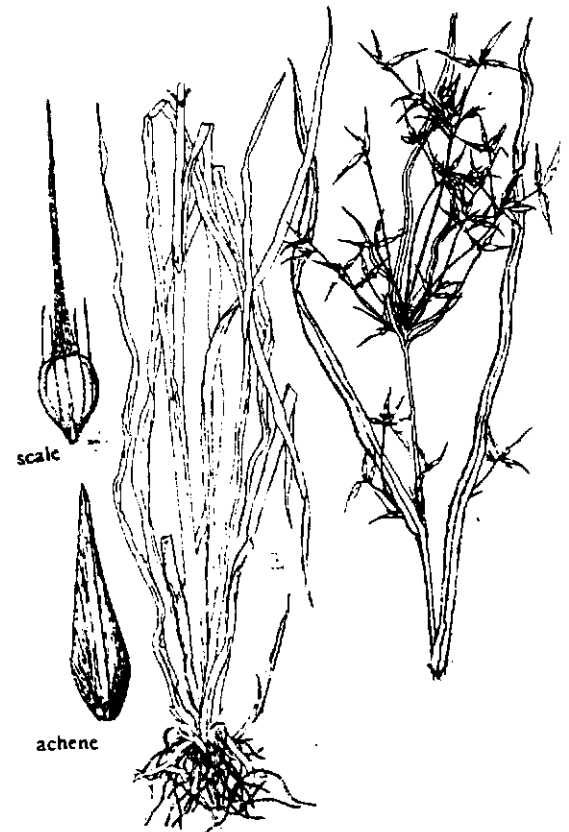
INUNDATED HORNED-SEDGE
(*Rhynchospora inundata* (Oakes) Fern.)

Description

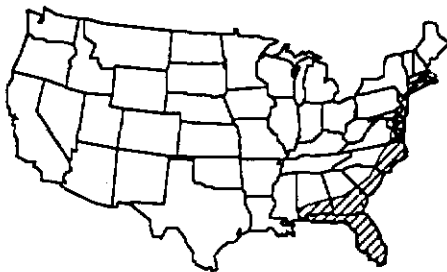
Inundated Horned-sedge is one of the largest members of its genus, with stems 20-60 cm high from spreading scaly rhizomes that form loose clumps. It differs from nearly all the others by its diffusely branched inflorescence composed of loosely arranged and spread-open terminal and axillary clusters (glomerules) of 1-6 flower spikelets. The spikelets are composed of small beaked achenes (hard, one-seeded fruits) with a relatively long (12-15 mm) and subulate (awl-shaped) beak or tubercle and 4-6 minute bristles (modified petals) that surpass the achene in length. Fruiting occurs from July to September. The slender, erect leaves (4-7 mm wide) noticeably overtop the entire inflorescence.

Range

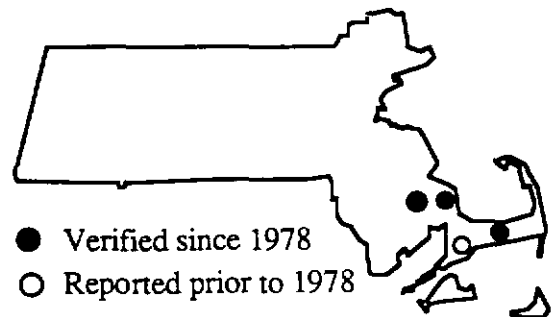
Inundated Horned-sedge is restricted to the outer Atlantic Coastal Plain from southeastern Massachusetts to southern Florida and west to Alabama, possibly into Mississippi. Apparently its range does not include Maryland or West Virginia.



R. Godfrey & J. Wooten. Aquatic & Wetland Plants of Southeastern U.S. The U. of Georgia Press, 1981



Range of Inundated Horned-sedge



Distribution in Massachusetts by Town

Similar Species

In New England, the only similar species is Large Horned-sedge (*R. macrostachya*). It has, however, a longer stem (1-2 m.), barely or not overtopped by broader (1 cm), more lax leaves and it is tussock-growing, rather than stoloniferous. Its inflorescence consists of tight hemispherical clusters, never open or loose, and composed of many more (10-50) spikelets. The two species are sometimes found together, but Inundated Horned-sedge usually grows in deeper water.

Habitat in Massachusetts

Inundated Horned-sedge is an emergent species from very shallow water on peaty-muddy bottoms of small freshwater ponds. It has adapted to the unpredictable or infrequent water level fluctuations occurring in these habitats by regulating seed germination to respond to periods of drought, and growth, flowering, and fruiting to respond to reinundation. As a result, populations of Inundated Horned-sedge are largest and often dominant following those years when drought exposed the substrate. In other years it seems to disappear altogether, and may only survive by remaining dormant or reproducing vegetatively. Some resident pond species especially frequent on the low or bottom zones of muddy ponds are Spike-sedge (*Eleocharis tuberculosa*), Bayonet and Canada Rush (*Juncus militaris* and *J. canadensis*), Big Yellow-eyed Grass (*Xyris smalliana*), and White or Bog Beak-sedge (*Rhynchospora alba*).

Population Status

Inundated Horned-sedge is currently listed as Threatened in Massachusetts and also is listed as a rare species in Delaware, New Jersey, New York, and Rhode Island. Its status in the Deep South is not well-known, but it appears to be relatively common in Alabama and Florida. Possibly it has been overlooked because of sporadic appearance within its habitat and similarity to the southern *R. corniculata*. It may also be in serious decline due to the vulnerability and ease of converting small and shallow ponds to agricultural use. In Massachusetts, it has been found at 9 current sites plus an additional 3 historical (before 1978) sites. At least one historical site was converted to a cranberry bog, and another was filled by development. The third, the Type Station, has ample suitable habitat, but plants have not been seen there since 1928, although present at an adjacent pond.